

From: [Thomas Steeger](#)
To: [Carol Stangel](#)
Subject: Re: Question...
Date: 01/18/2013 11:53 AM

Thanks Carol! A minor point; PMRA is the the acronym for Pest Management Regulatory Agency (not Authority).

Thomas Steeger, Ph.D.
Senior Science Advisor
Environmental Fate and Effects Division
Office of Pesticide Programs
(703) 305-5444 (office)

▼ Carol Stangel---01/18/2013 11:46:37 AM---Hello Tom, Thank you again for asking about regulatory issues associated with neonicotinoid seed tr

From: Carol Stangel/DC/USEPA/US
To: Thomas Klevorn <tbklev@gmail.com>
Cc: Anne Overstreet/DC/USEPA/US@EPA, Neil Anderson/DC/USEPA/US@EPA, Thomas Moriarty/DC/USEPA/US@EPA, Thomas Steeger/DC/USEPA/US@EPA, Richard Keigwin/DC/USEPA/US@EPA
Date: 01/18/2013 11:46 AM
Subject: Re: Question...

Hello Tom,

Thank you again for asking about regulatory issues associated with neonicotinoid seed treatments. We've developed the following information in response to your questions.

1. What are the main issues the EPA is investigating concerning the neonicotinoid class of insecticides (e.g., insect resistance, bee colony collapse disorder, eco-toxicology, environmental fate, water)?

EPA is concerned about potential effects of pesticides including the neonicotinoids on pollinators and is engaged in national and international efforts to address this issue. We have been working closely with researchers in the U.S. Department of Agriculture, other federal and state agencies, industry and academia and with beekeepers both here and abroad to understand the factors associated with losses due to Colony Collapse Disorder and the declines in pollinator health. The prevailing theory among the global scientific and regulatory communities is that the declines in the health of honey bees in general are related to complex interactions among multiple stressors that bees encounter, including inadequate food sources, diseases (such as parasites and viruses), habitat loss and bee management practices, as well as pesticides. While our understanding of the potential role of pesticides in pollinator health declines is still progressing, we continue to seek to learn what regulatory changes, if any, may be effective.

EPA currently is reviewing the neonicotinoid pesticides individually through

registration review, the Agency's program for periodically reviewing all registered pesticides to make sure they continue to meet the statutory standard and will not pose unreasonable adverse effects to human health and the environment when used as directed by approved product labeling. EPA's re-evaluation of the neonicotinoids will include both human health and ecological assessments. While the effects of the neonic compounds vary among different taxonomic groups and between the compounds, both aquatic and terrestrial invertebrates appear to be more sensitive to these compounds than other wildlife and human health.

To assess the potential risk to terrestrial invertebrates, for which the honey bee serves as the surrogate species, the Agency will follow its recently proposed pollinator risk assessment process. (For information and comments of the FIFRA Scientific Advisory Panel on this process, please see: <http://www.epa.gov/scipoly/sap/meetings/2012/091112meeting.html>.) Data being required for each of the neonicotinoid compounds through the registration review program varies and reflects uncertainties in the Agency's data base for each of these compounds.

For example, EPA has already required several honey bee exposure and effect studies for imidacloprid; we will issue similar requirements for the other neonicotinoids in the near future. These studies focus on the effects of dietary exposure (oral toxicity) as well as contact exposure; differential toxicity of honey bee larvae compared to adult bees; field pollinator testing to examine potential effects at the whole colony level following prolonged exposure; and, multi-year studies of residues in pollen and nectar in rotational crops to determine whether residues accumulate with repeated use. The Agency will use information from these studies to ascertain whether the neonicotinoid pesticides meet the statutory standard of no unreasonable adverse effects to human health or the environment.

2. Generally speaking, when are results of any ongoing re-evaluations/investigations of neonicotinoid insecticides by the EPA expected to be complete?

Initially, EPA's re-evaluation of the neonicotinoids was scheduled to occur over multiple years. Some pesticides started registration review in 2008 and were expected to be finished in 2014, while others were to begin in the 2014-2016 timeframe; all of the re-evaluations were to be completed by 2021. We have adjusted the schedule to start the re-evaluations earlier and now expect to conclude registration review for most of the neonicotinoids by 2018 and all of them by the end of 2019.

The registration review schedule for each of the neonicotinoid compounds is summarized below:

	Initiation	Data Generation	Completion
Imidacloprid	Dec. 2008	2010-2015	2016-2017

Clothianidin	Dec. 2011	2013-2016	2017-2018
Thiamethoxam	Dec. 2011	2013-2016	2017-2018
Dinotefuran	Dec. 2011	2013-2016	2017-2018
Acetamiprid	Dec. 2012	2014-2017	2018-2019
Thiacloprid	Dec. 2012	2014-2017	2018-2019

For more detailed information about these reviews, see the individual chemical pages in Chemical Search, www.epa.gov/pesticides/chemicalsearch/.

3. Will neonicotinoid manufacturers be able to respond to any actions that might be recommended/taken by the EPA?

Registration review is an open, transparent process that includes several opportunities for public comment. In addition to providing a public comment period when a pesticide's registration review docket initially opens, EPA also routinely invites comment on draft risk assessments and proposed registration review decisions. The Agency considers comment and new information from stakeholders and the public in developing final risk assessments and risk management decisions about pesticides in registration review. For further information about the registration review process, see http://www.epa.gov/oppsrrd1/registration_review/reg_review_process.htm and the registration review final rule, document EPA-HQ-OPP-2004-0404-0052 at www.regulations.gov.

If at any time the EPA determines there are urgent human and/or environmental risks from pesticide exposures that require prompt attention, the Agency will take appropriate regulatory action, regardless of the registration review status of that pesticide.

4. Which, if any, international regulatory partners is the EPA working with regarding neonicotinoids?

EPA is coordinating its re-evaluation of several of the neonicotinoids (imidacloprid, clothianidin, thiamethoxam, and dinotefuran) with our international partner, Health Canada's Pest Management and Regulatory Authority, and our state partner, California's Department of Pesticide Regulation. EPA has also been working closely with its European partners on actions around these compounds, including staying abreast of data that is being generated by and for European regulatory authorities on these compounds and on actions to improve coordination and communication.

I hope this information is useful. Please let us know if we can be of further assistance.

Sincerely,
Carol

▼ Thomas Klevorn ---01/10/2013 09:14:36 PM---Dear Carol, Thank you for your reply. I will review the suggested sources of information as you hav

From: Thomas Klevorn <tbklev@gmail.com>
To: Carol Stangel/DC/USEPA/US@EPA
Cc: Thomas Moriarty/DC/USEPA/US@EPA, Thomas Steeger/DC/USEPA/US@EPA, Neil Anderson/DC/USEPA/US@EPA, Anne Overstreet/DC/USEPA/US@EPA
Date: 01/10/2013 09:14 PM
Subject: Re: Question...

Dear Carol,

Thank you for your reply. I will review the suggested sources of information as you have suggested.

In terms of questions, I am interested in the following specific information:

1. What are the main issues the EPA is investigating concerning the neonicotinoid class of insecticides (e.g., insect resistance, bee colony collapse disorder, eco-toxicology, environmental fate, water)?
2. Generally speaking, when are results of any ongoing re-evaluations/investigations of neonicotinoid insecticides by the EPA expected to be complete?
3. Will neonicotinoid manufacturers be able to respond to any actions that might be recommended/taken by the EPA?
4. Which, if any, international regulatory partners is the EPA working with regarding neonicotinoids?

More generally, I'd simply like the opportunity to speak with a person at the EPA who is knowledgeable about this class of insecticides to better understand the issues the EPA has determined warrant further consideration and investigation. I understand that there may not be clear, definite answers available at this point in time and I am not looking for anything more than information that might be available to the general public.

My interest is to learn a bit more about the neonicotinoids as a matter of general background and information. I am not a member of the press, print or news media and I do not plan to publish any information that the EPA might provide.

Once again, thank you very much for your help regarding my questions and interests. I look forward to hearing from you in the near future.

Best regards,

Tom

Thomas B Klevorn | Cell: [REDACTED] | Email: tbklev@gmail.com | Skype: tbklev

On Jan 10, 2013, at 6:56 PM, Stangel.Carol@epamail.epa.gov wrote:

Dear Mr. Klevorn,

Thank you for your request to speak with someone in EPA's Office of Pesticide Programs about the regulatory status/issues associated with neonicotinoid seed treatments. You indicated that this request is part of some work you are doing in the area of insect resistance management.

So that we can determine who can best assist you, could you let us know more about what questions you have?

Also, are you affiliated with the print or news media, or planning to publish the information that the Agency provides?

If you have not already visited our website, you may be interested to see EPA's Pollinator Protection Web page, <http://www.epa.gov/opp00001/ecosystem/pollinator/index.html>. This resource summarizes the Agency's current activities, plans and goals to advance scientific knowledge relating to the assessment of potential risks to pollinators, improve our risk management tools, and increase communication and collaboration within and beyond the federal government to address pollinator issues.

You may also be interested to know that documents pertaining to EPA's regulation of the neonicotinoids are available on the individual chemical pages in Chemical Search, at www.epa.gov/pesticides/chemicalsearch/.

Thanks again,

Carol

Carol Stangel
Communications Officer
Pesticide Re-evaluation Division

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US Environmental Protection Agency
Washington, DC 20460
Telephone: 703-308-8007
Email: stangel.carol@epa.gov

<graycol.gif>Thomas Klevorn ---01/10/2013 05:53:17 PM---Dear Ms. Stangel, As Dr. Steeger has suggested in hi snote below, I am contacting you regarding the

From: Thomas Klevorn <tbklev@gmail.com>
To: Carol Stangel/DC/USEPA/US@EPA
Cc: Thomas Moriarty/DC/USEPA/US@EPA, Thomas Steeger/DC/USEPA/US@EPA
Date: 01/10/2013 05:53 PM
Subject: Re: Question...

Dear Ms. Stangel,

As Dr. Steeger has suggested in hi snote below, I am contacting you regarding the topics listed in a note that I sent to him earlier this week. If possible, I would appreciate a few minutes of your time to discuss regulatory status/issues associated with neonicotinoid seed treatments. Please let me know a good time to contact you and I will give you ring. Thank you.

Best regards,

Tom

Thomas B Klevorn | Cell: [REDACTED] | Email: tbklev@gmail.com | Skype: tbklev

On Jan 10, 2013, at 1:26 PM, Steeger.Thomas@epamail.epa.gov wrote:

Dear Dr. Klevorn,

I apologize for the delayed response to your email and voice mail messages; however, I am currently on travel. Inquiries regarding specific pesticide chemistries are typically referred to

the communication officer for the particular Division in which those chemicals reside. I recommend that you contact Ms. Carol Stangel in the Pesticide Reregistration Division; she can in turn identify the most efficient way in which to respond to your information needs.

Tom

Thomas Steeger, Ph.D.
Senior Science Advisor
Environmental Fate and Effects Division

Sent by EPA Wireless E-Mail Services.

From: Thomas Klevorn [tbklev@gmail.com]
Sent: 01/09/2013 11:35 AM CST
To: Thomas Steeger
Subject: Question...

Dear Mr. Steeger,

Following up on a voice message that I left for you earlier today (9-Jan-13), I'm trying to talk with people who have knowledge/perspectives about regulatory status/issues associated with neonictinoid seed treatments. As part of some work I am doing in the area of insect resistance management, I am trying to better understand the issues associated with this technology. Would you be willing to speak with me about this or suggest people who might be able to do so? I'm not looking for any confidential information or strategies. I'm really interested in general industry and scientific views and perspectives as well as thoughts regarding the future.

Please let me know a good time to call and I will give you a ring. Thanks for any help you may be able to provide.

Best regards,

Tom

Thomas B Klevorn | Cell: [REDACTED] | Email: tbklev@gmail.com |
Skype: tbklev

